

Exemption No. 7366

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
FORT WORTH, TEXAS 76193-0100**

In the matter of the petition of

Era Aviation, Inc.

for an exemption from § 29.1(c) of Title
14, Code of Federal Regulations

Regulatory Docket No. 013SW

DENIAL OF EXEMPTION

By letter dated March 22, 2000, Mr. Dave Murphy, Project Manager, Era Aviation, Inc. (Era), P.O. Box 6550, Lake Charles, LA 70606, petitioned the Federal Aviation Administration (FAA) on behalf of Era for an exemption from § 29.1(c) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption, if granted, would allow three (3) Sikorsky Model S-61N helicopters (S-61N) to be certificated as Category B rotorcraft with a maximum gross weight greater than 20,000 pounds and 10 or more passenger seats. Additional substantiating information was submitted in a letter received on April 25, 2000, containing Rotorcraft Flight Manual (RFM) Supplement Number 15.

A summary of the petition with an invitation to comment on the petition was published in the Federal Register on July 13, 2000 [65 FR 43397]. No comments were received on this petition.

Section of the Federal Aviation Regulations (FAR) affected:

Section 29.1(c) – Rotorcraft with a maximum gross weight greater than 20,000 pounds and 10 or more passenger seats must be type certificated as Category A rotorcraft.

Related Sections of the FAR:

Section 29.1(d) - Rotorcraft with a maximum gross weight greater than 20,000 pounds and nine or less passenger seats may be type certificated as Category B rotorcraft provided the Category A requirements of Subparts C, D, E, and F of this Part are met.

The petitioner's supportive information is as follows:

"The S-61N has shown an equivalent level of safety during operations in the North Sea with a fuel jettison system and a 20,500-pound gross weight as approved by the U.K. CAA for Group "A" operation. See attachment: Bristow Helicopters Rotorcraft Flight Manual Supplement, CAA Approved 25 March 1997."

"The three (3) helicopters owned by Era incorporate a fuel jettison system that will jettison 600 pounds of fuel per minute. See Attachment: STC SR09218RC."

"Through advances in technology, the aircraft is capable of operating at a higher gross weight than originally certified and is documented by the increased limits to Category A operations. Note 13 of Type Certificate Data Sheet 1H15 approves this gross weight increase. The three (3) helicopters operated by ERA Aviation comply with the provisions of Note 13."

"The S-61N is Type Certificated as an amphibious aircraft that further enhances (safety) over water operations."

"The S-61N meets the requirements of FAR 29.563 for structural ditching provisions for a gross weight of 20,500 pounds."

"Sikorsky Aircraft, during Type Certification Flight Testing, demonstrated an equal level of safety in 1977 at a gross weight of 20,500 pounds for Category B operations. See Attachment: Letter from Sikorsky Flight test pilot."

"The S-61N is certified to 20,500-pounds gross weight Category A (RFM Supplement 15) with passengers and 20,000-pounds gross weight Category B with passengers due to its passenger capacity. The aircraft is also certified to 22,000-pounds gross weight Category B (RFM Supplement 16) with jettisonable loads, FAR 133."

"Medical emergency evacuation is a prime concern. Due to the extended distances to the offshore platforms, or drill ships, any increase in operational range for the helicopter that will provide a minimum or no refueling stops will ensure a better chance of survival for the critical patient in medical emergencies."

"Era would accept a restriction to operate the rotorcraft in Category B at the requested gross weight of 20,500 pounds to an altitude of 5000 ft. or less above sea level for Category B limit of 10 or more passenger seats."

"Today's oil market is moving further offshore to deep water in the Gulf of Mexico in order to expand the available domestic oil and gas reserves. The expansion is critical to America's continued economic success so as to reduce America's reliance on foreign oil."

The FAA's analysis/summary is as follows:

The S-61N is certificated as both a Category A and a Category B helicopter. The effect of granting this petition would be to certificate these aircraft to be able to operate without complying with the requirements in subparts B (Flight) and G (Operating Limitations) at a weight and passenger seat combination that normally requires compliance (Reference § 29.1(c)). These regulations primarily cover the helicopter's takeoff and landing performance as well as its ability to continue to operate safely in case of an engine failure. If the petition was granted, during certain flight phases, these aircraft could operate with reduced safety margins.

The petitioner reasons that a level of safety equal to that provided by the rule from which the exemption is sought is provided by the fuel jettison system (FJS) installed on the aircraft. The FAA does not agree with this assertion.

For the takeoff phase in which the differences between Category A and Category B are most significant, the use of the FJS is not practical and may actually create a hazardous situation. If an emergency develops during takeoff and fuel is jettisoned, the immediate area may no longer be suitable for a safe landing in case of an aborted takeoff. Further, in a worst-case scenario, the FJS would require 50 seconds to jettison 500 pounds of fuel, bringing the 20,500-pound gross weight rotorcraft back to the Category B requirements. During an emergency landing shortly after takeoff, the flight crew may not have the 50 seconds required to jettison the fuel.

To strengthen the petitioner's position, the petitioner cites the U.K. CAA approval for "Group A" operation in the North Sea using Bristow Helicopters Rotorcraft Flight Manual (RFM) Supplement, CAA Approved 25 March 1997. However, the RFM for the S-61N helicopter prohibits fuel jettisoning during takeoff. Therefore, even assuming that a pilot could safely accomplish the fuel jettison within 50 seconds during takeoff, this would be contrary to the RFM prohibition.

In consideration of the foregoing, I find a grant of exemption would not provide a level of safety equivalent to the current regulation. Era has not given sufficient reasons as to why such relief would be in the public interest, nor has it been shown how the public interest in safety is outweighed by the public benefit proposed by the petitioner. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701, delegated to me by the Administrator (14 CFR 11.53), the petition of Era for an exemption from § 29.1(c) is hereby denied.

Issued in Fort Worth, Texas, on September 21, 2000.



Mark R. Schilling
Acting Manager
Rotorcraft Directorate
Aircraft Certification Service, ASW-100